- **4**. The portable electronic device of claim **2** wherein the control logic is operative to control the controllable skin texture surface to change the tactile configuration of a user interface key of the portable electronic device.
- 5. The portable electronic device of claim 1 wherein the hydraulic actuation structure comprises a substrate that comprises at least one fluid channel and wherein the flexible skin structure is coupled to the substrate and comprises a plurality of fluid pockets corresponding to texture features that are in fluid communication with the at least one fluid channel.
 - ${f 6}.$ The portable electronic device of claim ${f 5}$ comprising:
 - a fluid pump operative to move the fluid in the fluid passage; and
 - a movable housing portion that is operatively coupled with the fluid pump such that mechanical movement of the housing portion causes the fluid pump to pump fluid in and out of the at least one fluid passage.
- 7. The portable electronic device of claim 5 further comprising a fluid manifold structure operatively coupled to the at least one fluid channel.
 - **8**. A handheld wireless device comprising:
 - a wireless telephone subsystem;
 - a display operatively coupled to the wireless telephone subsystem; and
 - a controllable skin texture surface comprising:
 - a skin texture surface actuation structure that is comprised of a hydraulic actuation structure comprising a fluid and a flexible skin structure that moves in response to movement of the fluid to change a tactile configuration of at least a portion of the controllable skin texture surface.
- **9**. The handheld wireless device of claim **8** comprising control logic to control a pump to control movement of the fluid.
- 10. The handheld wireless device of claim 9 wherein the control logic is operative to control the controllable skin

- texture surface to change the tactile configuration of a nonuser interface portion of the portable electronic device.
- 11. The handheld wireless device of claim 9 wherein the control logic is operative to control the controllable skin texture surface to change the tactile configuration of a user interface key of the portable electronic device.
- 12. The handheld wireless device of claim 8 wherein the hydraulic actuation structure comprises a substrate that comprises a plurality of fluid channels and wherein the flexible skin structure is coupled to the substrate and comprises a plurality of fluid pockets corresponding to texture features that are in fluid communication with the plurality of fluid channels.
 - 13. The handheld wireless device of claim 12 comprising: a fluid pump operative to move the fluid in the fluid passage; and
 - a movable housing portion that is operatively coupled with the fluid pump such that mechanical movement of the housing portion causes the fluid pump to pump fluid in and out of the plurality of fluid passages.
- 14. The handheld wireless device of claim 12 further comprising a fluid manifold structure operatively coupled to the plurality of fluid channels.
- 15. The handheld wireless device of claim 12 wherein the fluid pockets are positioned to overlap the plurality of fluid passages.
- 16. The handheld wireless device of claim 12 comprising at least one light source positioned to provide light into at least one of the fluid passages.
- 17. The handheld wireless device of claim 8 wherein the fluid is colored and changes the visual appearance of a raised texture surface.
- 18. The handheld wireless device of claim 8 wherein the flexible skin structure is comprised of multiple features wherein movement of each of the features is controlled independently.

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